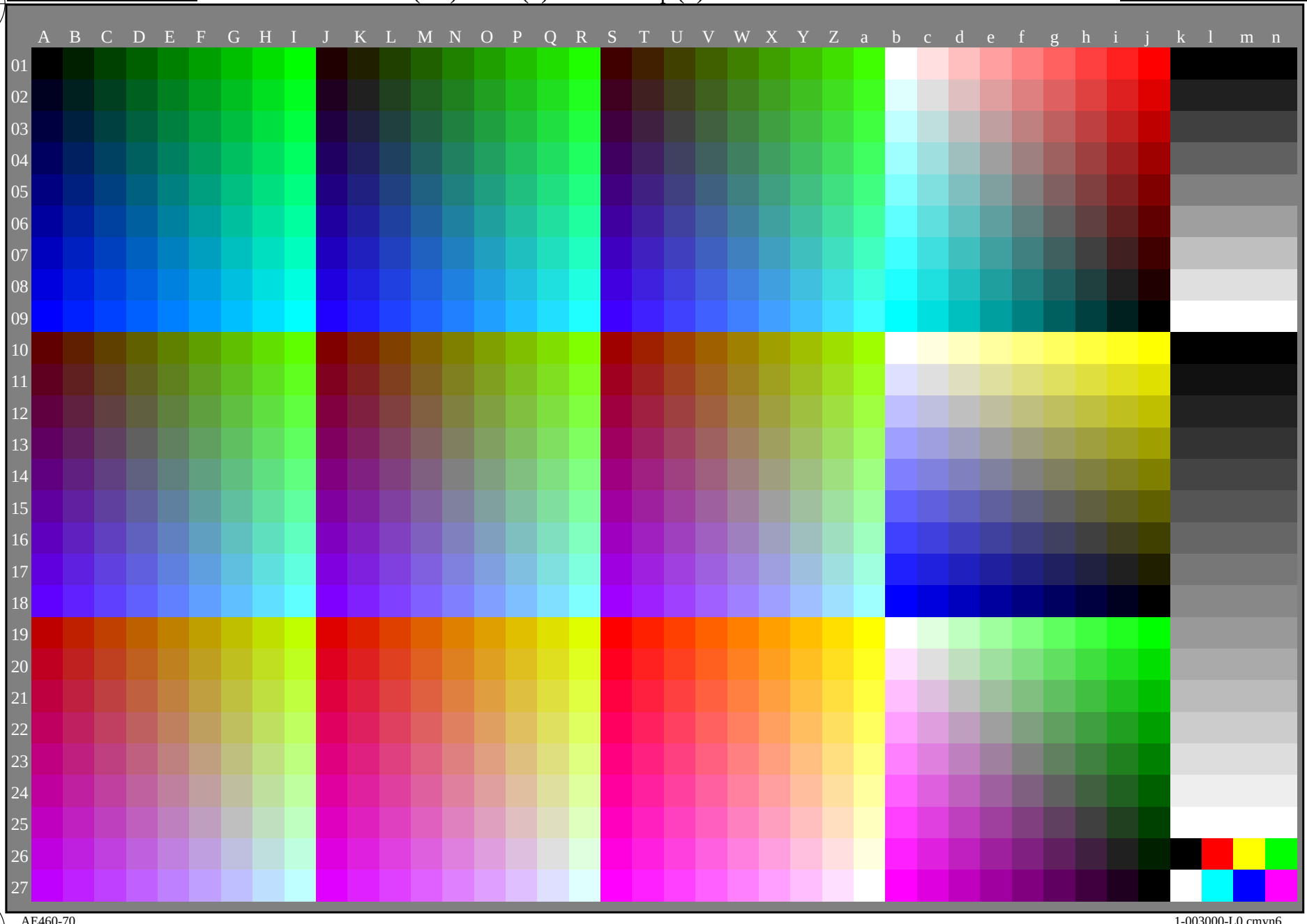


AE460-70

1-003000-L0 cmyn6

see similar files: http://farbe.li.tu-berlin.de/AE46/AE46.HTM
technical information: http://farbe.li.tu-berlin.de/ or http://farbe.li.tu-berlin.de/AE.HTM

TUB Registration: 20190301-AE46/AE46L0NP.PDF /.PS
application for measurement or viewing of display and print output

TUB material: code=rha4ta

Test chart AE46 similar to test chart 1 of DIN 33872-6
1080 standard colours; Test chart similar to DIN 33872-6

input: *rgb/cmy0/000n/w set...*
output: *->rgb*$_{dd}$ *setrgbcolor*

Discriminability of chromatic colours

Remarks: This test uses many colour scales of 9 steps

Hue plane Red - Cyan blue (rows 01 to 09, column b to j)
Discriminability of 81 chromatic colours
Are all the 81 colours different? **Yes/No**
Only in case of "No": How many are different? Of the 81 are ..... different

Hue plane Yellow - Blue (rows 10 to 18, column b to j)
Discriminability of 81 chromatic colours
Are all the 81 colours different? **Yes/No**
Only in case of "No": How many are different? Of the 81 are ..... different

Hue plane Green - Magenta red (rows 19 to 27, column b to j)
Discriminability of 81 chromatic colours
Are all the 81 colours different? **Yes/No**
Only in case of "No": How many are different? Of the 81 are ..... different

Result: Of the 243 (=3x81) colours are ..... different

Artifacts, please describe if visible:
.....
.....
.....

Remarks about the creation and content of the PDF files:

Sometimes "colour smoothing" is a default setting.
In this case the 9 steps are often not visible and may be counted as one step.

Sometimes "optimizing the PDF output for the web" is a default setting.
For example this setting may reduce the 1080 colours on a page to 256 colours.

AE460-71 Part of test chart AE46 with 1080 colours; 9 or 16 step colour scales; data in column (b-n): ***rgb*** 1-003110-L0 cmyn6

Agreement with elementary colours

Remarks: This test uses many colour scales of 9 steps
Red R_e and Green G_e are defined by the visual criteria: ***neither yellowish nor blueish.***
Yellow Y_e and Blue B_e are defined by the visual criteria: ***neither reddish nor greenish.***

Hue plane Red - Cyan blue (rows 01 to 09, column b to j)
Agreement with elementary colours
Is the colour at the position (j,01) the elementary colour Red R_e? **Yes/No**
Only in case of "No": The colour at this position appears: yellowish/blueish

Hue plane Yellow - Blue B_e (rows 10 to 18, column b to j)
Agreement with elementary colours
Is the colour at the position (j,10) the elementary colour Yellow Y_e? **Yes/No**
Only in case of "No": The colour at this position appears: reddish/greenish

Is the colour at the position (b,18) the elementary colour Blue B_e? **Yes/No**
Only in case of "No": The colour at this position appears: reddish/greenish

Hue plane Green - Magenta red (rows 19 to 27, column b to j)
Agreement with elementary colours
Is the colour at the position (j,19) the elementary colour Green G_e? **Yes/No**
Only in case of "No": The colour at this position appears: yellowish/blueish

Result: Of the 4 elementary colours (e. g. 3) are ..... acceptable as elementary colours.

Discriminability of 9 and 16 grey steps

Discriminability of 9 steps (rows 01 to 09, column k to n)
Are the 9 steps distinguishable? **Yes/No**
If No: How many can be distinguished? of 9 greys ..... are distinguishable.

Discriminability of 16 steps (rows 10 to 27, column k to n)
Are the 16 steps distinguishable? **Yes/No**
If No: How many can be distinguished? of 16 greys ..... are distinguishable.

Artifacts, please describe if visible:
.....
.....

Remarks about the creation and content of the PDF files:

Sometimes "colour smoothing" is a default setting.
In this case the 9 steps are often not visible and may be counted as one step.

Sometimes "optimizing the PDF output for the web" is a default setting.
For example this setting may reduce the 1080 colours on a page to 256 colours.

AE460-71 Part of test chart AE46 with 1080 colours; 9 or 16 step colour scales; data in column (b-n): ***rgb*** 1-003110-L0 cmyn6

Documentation of file format, hardware and software for this test:

PDF file:
http://farbe.li.tu-berlin.de/AE46/AE46F0PX_CY8_1.PDF **underline: Yes/No**
PS file:
http://farbe.li.tu-berlin.de/AE46/AE46F0PX_CY8_1.PS **underline: Yes/No**

Used computer operating system:
either one of Windows/Mac/Unix/other and version:.....

This evaluation is for the output: **underline: monitor/data projector/printer**
Device model, driver and version:.....

output with PDF/PS-file: **underline: PDF/PS file**

For output with PDF file AE46F0PX_CY8_1.PDF
either PDF-file transfer "download, copy" to PDF device.....
or with computer system interpretation by "Display-PDF":.....
or with software. e. g. Adobe-Reader/-Acrobat and version:.....
or with software e. g. Ghostscript and version:.....

For output with PS file AE46F0PX_CY8_1.PS
either PS-file transfer "download, copy" to PS device.....
or with computer system interpretation by "Display-PS":.....
or with software e. g. Ghostscript and version:.....
or with software e. g. Mac-Yap and version:.....

Special remarks: e. g. output of Landscape (L)
.....
.....
.....

part 3, AE460-7dd: 00301

Documentation of assessor colour-vision properties for visual assessment

The assessor has **normal** colour vision according to one test: **underline: Yes/No**
either according to DIN 6160:1996 with Anomaloskop of *Nagel* **underline: Yes/unknown**
or with test charts using colour points according to *Ishihara* **underline: Yes/unknown**
or tested with, please specify: ..... **underline: Yes/unknown**

For visual evaluation of the display (Monitor, data projector) output

Office workplace illumination is daylight (clouded/north sky) **underline: Yes/No**
PDF file: http://farbe.li.tu-berlin.de/AE46/AE46F0PX_CY8_3.PDF **underline: Yes/No**
PS file: http://farbe.li.tu-berlin.de/AE46/AE46F0PX_CY8_3.PS **underline: Yes/No**
picture $A7_{dd}$ contrast range: (>F:0) (F:0) (E:0) (D:0) (C:0) (A:0) (9:0) (7:0) (5:0) (3:0) (<3:0)
compare standard print output according to ISO/IEC 15775 with range F:0 **underline: Yes/No**
Remark: In daylighted offices the contrast range is in many cases:
on display between: >F:0 and E:0 (monitor), D:0 and 3:0 (data projector)

Only for optional colorimetric specification with PDF/PS file output

PDF file: http://farbe.li.tu-berlin.de/AE46/AE46F0PX_CY8_3.PDF
picture $A7_{dd}$ **underline: Yes/No**
PS file: http://farbe.li.tu-berlin.de/AE46/AE46F0PX_CY8_3.PS
picture $A7_{dd}$ **or underline: Yes/No**
colour measurement and specification for:
CIE standard illuminant D65, 2 degree observer, CIE 45/0 geometry: **underline: Yes/No**
If No, please give other parameters: .....
Colorimetric specification for 17 step colours of http://farbe.li.tu-berlin.de/OE70/OE70L1NP.PDF
Exchange of CIELAB data in file http://farbe.li.tu-berlin.de/AE82/AE82L0NP.TXT and transfer
of the PS file AE82L0NP.PS (=.TXT) to the PDF-file AE82L0NP.PDF **underline: Yes/No**
If No, please describe other method: .....

part 4, AE461-7dd: 00301

i	*LAB*ref*			*l*out*	*LAB*out*			*LAB*out-ref*			*ΔE**
1	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,01
2	6,36	0,00	0,00	0,06	6,36	0,00	0,00	0,00	0,00	0,00	0,01
3	12,72	0,00	0,00	0,13	12,72	0,00	0,00	0,00	0,00	0,00	0,01
4	19,08	0,00	0,00	0,20	19,08	0,00	0,00	0,00	0,00	0,00	0,01
5	25,44	0,00	0,00	0,26	25,44	0,00	0,00	0,00	0,00	0,00	0,01
6	31,80	0,00	0,00	0,33	31,80	0,00	0,00	0,00	0,00	0,00	0,01
7	38,16	0,00	0,00	0,40	38,16	0,00	0,00	0,00	0,00	0,00	0,01
8	44,52	0,00	0,00	0,46	44,52	0,00	0,00	0,00	0,00	0,00	0,01
9	50,88	0,00	0,00	0,53	50,88	0,00	0,00	0,00	0,00	0,00	0,01
10	57,24	0,00	0,00	0,60	57,24	0,00	0,00	0,00	0,00	0,00	0,01
11	63,60	0,00	0,00	0,66	63,60	0,00	0,00	0,00	0,00	0,00	0,01
12	69,96	0,00	0,00	0,73	69,96	0,00	0,00	0,00	0,00	0,00	0,01
13	76,32	0,00	0,00	0,80	76,32	0,00	0,00	0,00	0,00	0,00	0,01
14	82,68	0,00	0,00	0,86	82,68	0,00	0,00	0,00	0,00	0,00	0,01
15	89,04	0,00	0,00	0,93	89,04	0,00	0,00	0,00	0,00	0,00	0,01
16	95,41	0,00	0,00	1,00	95,41	0,00	0,00	0,00	0,00	0,00	0,01
17	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,01
18	23,85	0,00	0,00	0,25	23,85	0,00	0,00	0,00	0,00	0,00	0,01
19	47,70	0,00	0,00	0,50	47,70	0,00	0,00	0,00	0,00	0,00	0,01
20	71,55	0,00	0,00	0,75	71,55	0,00	0,00	0,00	0,00	0,00	0,01
21	95,41	0,00	0,00	1,00	95,41	0,00	0,00	0,00	0,00	0,00	0,01

Start output S1
Specification according to ISO/IEC 15775 Annex G and DIN 33866-1 Annex G

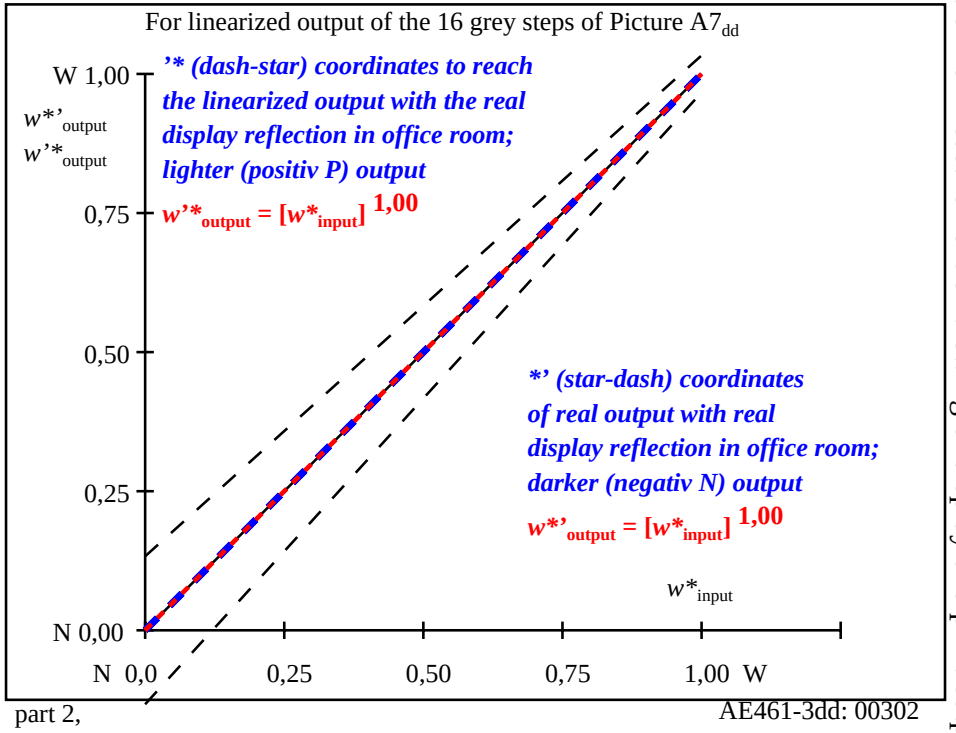
Mean lightness difference (16 steps)
ΔE^*_{CIELAB} = 0,0

Mean lightness difference (5 steps)
ΔL^*_{CIELAB} = 0,0

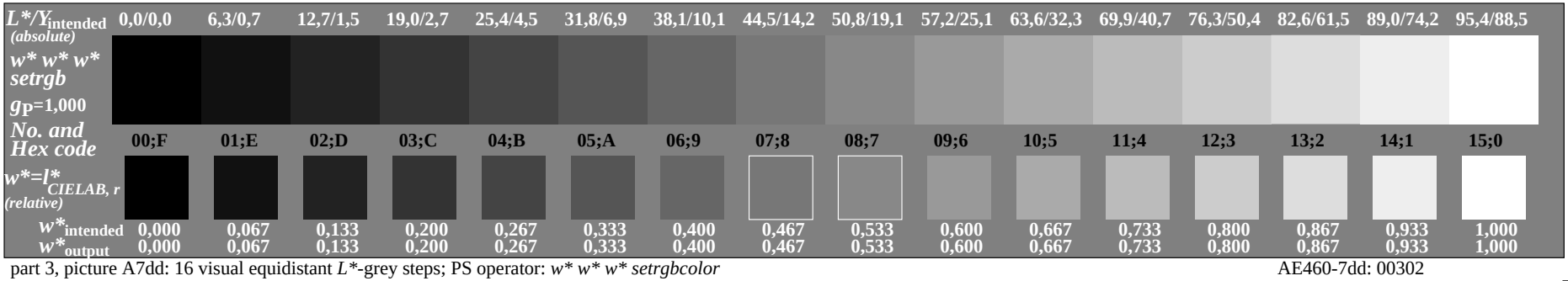
Mean colour reproduction index: $R^*_{ab,m}$ = 99,9

part 1, AE460-3dd: 00302

For linearized output of the 16 grey steps of Picture A7$_{dd}$



part 2, AE461-3dd: 00302



part 3, picture A7dd: 16 visual equidistant *L**-grey steps; PS operator: *w* w* w* setrgbcolor* AE460-7dd: 00302

In-out: Test chart AE46 similar to test chart 1 of DIN 33872-6
Viewing *Y* contrast Y_W:Y_N=88,9:0,31; Y_N-range 0,0 to <0,46

input: *rgb/cmy0/000n/w set...*
output: ->*rgb$_{dd}$ setrgbcolor*